



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAY 10, 2000

PTAS



101291207A

GANZLAW
BRADLEY M. GANZ
P.O. BOX 10105
PORTLAND, OREGON 97296

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/07/2000

REEL/FRAME: 010606/0096
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DOW, DANIEL B.

DOC DATE: 01/19/2000

ASSIGNEE:

MICRON TECHNOLOGY, INC.
8000 S. FEDERAL WAY
BOISE, IDAHO 83707

SERIAL NUMBER: 09499594
PATENT NUMBER:

FILING DATE: 02/07/2000
ISSUE DATE:

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

Form PTO-1519A

Expires 06/30/99

OMB 0651-0027

03-16-2000

U.S. Department of Commerce
Patent and Trademark Office
PATENT

RECORDED

101291207

PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

- (X) New
- () Resubmission (Non-Recordation)
Document ID#
- () Correction of PTO Error
Reel # Frame #
- () Corrective Document
Reel # Frame #

Conveyance Type

- (X) Assignment () Security Agreement
- () License () Change of Name
- () Merger () Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

() Departmental File () Secret File

 03/16/2000
 U.S. PTO
 09/499594
 03/16/2000

Conveying Party(ies)

() Mark if additional names of conveying parties attached

Name (line 1) Daniel B. Dow

Name (line 2)

Second Party

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

1 - 19 - 2000

Execution Date
Month Date Year

Receiving Party

() Mark if additional names of receiving parties attached

Name (line 1) Micron Technology, Inc.

Name (line 2)

Address (line 1) 8000 S. Federal Way

Address (line 2)

Address (line 3)

Boise

City

Idaho

State/Country

83707

Zip Code

() If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

EXPRESS MAIL LABEL NO. EL326146332US, DEPOSITED ON FEBRUARY 7, 2000

03/15/2000 DNGUYEN 00000138 501001 09499594

FOR OFFICE USE ONLY

01 FC:581

40.00 CH

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
 Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

FORM PTO-1619B

Expires 06/30/99

OMB 0651-0027

Page 2

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Correspondent Name and Address

Area Code and Telephone Number 503 224-2713Name Bradley M. GanzAddress (line 1) GanzLawAddress (line 2) P.O. Box 10105Address (line 3) Portland, Oregon 97296

Address (line 4)

Pages

Enter the total number of pages of the attached conveyance document
including any attachments.# 2

Application Number(s) or Patent Number(s)

() Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

Filed concurrently herewith

If this document is being filed together with a new Patent Application, enter the date the patent application was
signed by the first named executing inventor.Month Day Year
1 - 19 - 2000

Patent Cooperation Treat (PCT)

Enter PCT application number
only if a U.S. Application Number
has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Method of Payment:

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Fee Amount for Properties Listed (37 CFR 3.41):

Enclosed ()

Deposit Account (X)

\$ 40.00

Deposit Account Number:

50-1001

Authorization to charge additional fees:

Yes (X)

No ()

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any
attached copy is a true copy of the original document. Charges to deposit account are authorized, as
indicated herein.

Bradley M. Ganz

Name of Person Signing

Signature

February 7, 2000

Date

EXPRESS MAIL LABEL NO. EL326146332US, DEPOSITED ON FEBRUARY 7, 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Daniel B. Dow

Group Art Unit: Unknown

Serial No.: Unknown

Examiner: Unknown

Filed: Concurrently herewith

Attorney Docket: MIC/99-0003

For: METHOD OF FABRICATING A
SEMICONDUCTOR WORK OBJECT

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned does hereby:

SELL, ASSIGN AND TRANSFER to MICRON TECHNOLOGY, INC. (the "Assignee"), a corporation of Delaware, having a place of business at 8000 S. Federal Way, Boise, Idaho, 83707, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled: METHOD OF FABRICATING A SEMICONDUCTOR WORK OBJECT, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

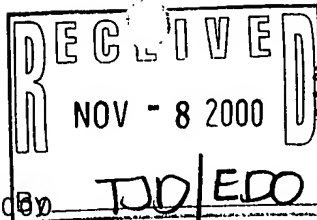
(Signature) Daniel B. Dow Date: 1-19-2000
Daniel B. Dow

STATE OF IDAHO)
County of ADA) ss.

BEFORE ME, this 19th day of JANUARY ~~19~~²⁰⁰⁰ personally appeared the above-named individual(s), to me known to be the person(s) who is (are) described in and who executed the foregoing assignment instrument and acknowledged to me that he/she (they) executed the same of his/her (their) own free will for the purpose therein expressed.



Suzanne R. Jerome
Notary or Consular Officer
My Commission Expires: 3/12/2002



114009 D239/P239

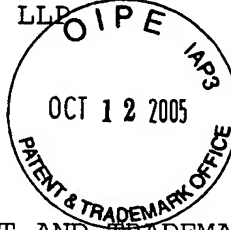
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

NOVEMBER 03, 2000

LUG

PTAS

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
ATTN: THOMAS J. D'AMICO
2101 L STREET NW
WASHINGTON, D.C. 20037-1526



101463752A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/31/2000

REEL/FRAME: 011073/0621
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HILLYER, LARRY

DOC DATE: 08/31/2000

ASSIGNOR:

BYRNE, STEVE

DOC DATE: 08/31/2000

ASSIGNOR:

WILLIAMSON, KELLY

DOC DATE: 08/31/2000

ASSIGNOR:

HAHN, DOUG

DOC DATE: 08/31/2000

ASSIGNEE:

MICRON TECHNOLOGY, INC.
8000 S. FEDERAL WAY
BOISE, IDAHO 83707-0006

SERIAL NUMBER: 09653561

FILING DATE: 08/31/2000

PATENT NUMBER:

ISSUE DATE:

011073/0621 PAGE 2

MARCUS KIRK, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

09-20-2000

Form PTO-1595

RECC




HEET

U.S. Department of Commerce
Patent and Trademark Office

101463752

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

<p>1. Name of conveying party(ies): Larry Hillyer, Steve Byrne, Kelly Williamson and Doug Hahn</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies): Name: <u>Micron Technology, Inc.</u></p> <p>Internal Address:</p> <p>Street Address: <u>8000.S. Federal Way</u></p> <p>City: <u>Boise</u></p> <p>State: <u>Idaho</u> Zip: <u>83707-0006</u></p> <p>Country: _____</p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of Conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date(s): <u>8/31/00</u></p>	<p>4. Application number(s) or patent number(s): <u>09/653561</u></p> <p>If this document is being filed together with a new application, the Execution date(s) of the new application is (are): <u>8/31/00</u></p> <p>A. Patent Application No.(s): _____ B. Patent No.(s): _____</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP</u></p> <p>Internal Address: <u>Atty. Dkt.: M4065.0239/P239</u></p> <p>Attn: <u>Thomas J. D'Amico</u></p> <p>Street Address: <u>2101 L Street NW</u></p> <p>City: <u>Washington</u> State: <u>DC</u> Zip: <u>20037 - 1526</u></p>	<p>6. Total number of applications and patents involved: _____</p> <p>7. Total fee (37 C.F.R 3.41) \$ <u>\$40.00</u></p> <p><input type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p><input checked="" type="checkbox"/> Credit any overpayment or debit any underpayment</p> <p>8. Deposit account number: <u>4 - 1073</u></p>
DO NOT USE THIS SPACE	
<p>9. Statement and signature.</p> <p><i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i></p> <p><u>Thomas J. D'Amico</u>  <u>August 31, 2000</u></p> <p>Reg. No. 28,371 Signature Date</p>	
<p>Total number of pages including cover sheet, attachments, and document: <u>6</u></p>	

Docket No.: M4065.0239/P239

Micron No.: 99-0544.00/US

ASSIGNMENT AND AGREEMENT

For value received, we, Larry Hillyer, Steve Byrne, Kelly Williamson and Doug Hahn, hereby sell, assign and transfer to Micron Technology, Inc., a corporation of the State of Delaware, having an office at 8000 S. Federal Way, Boise, Idaho 83706-9632, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to an invention entitled METHOD AND MATERIAL FOR REMOVING ETCH RESIDUE FROM HIGH ASPECT RATIO CONTACT SURFACES, described in an application for Letters Patent of the United States, executed by us of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Micron Technology, Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Micron Technology, Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Micron Technology, Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Micron Technology, Inc. in the United States and in all countries foreign to the United States, or to such nominees as Micron Technology, Inc. may designate.

Docket No.: M4065.0239/P239
Micron No.: 99-0544.00/US

We agree that, when requested, we shall, without charge to Micron Technology, Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

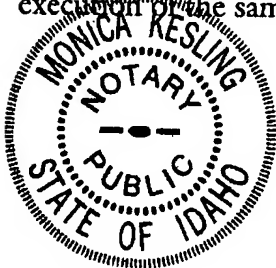
Larry Hillyer
Larry Hillyer

Date: 8/31/00

United States of America)
State Idaho) ss.:
County Ada)

On this 31 day of August, 2000, before me personally came Larry Hillyer, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Monica Resling
Notary Public



Docket No.: M4065.0239/P239

Micron No.: 99-0544.00/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ASSIGNMENT AND AGREEMENT

Signature Page for Second Inventor

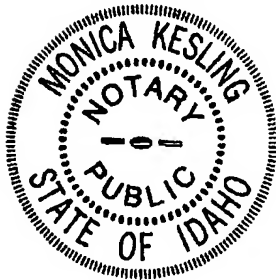
Steve Byrne
Steve Byrne

Date: 8-31-00

United States of America)
State Idaho)ss.:
County Ada)

On this 31 day of August, 2000, before me
personally came Steve Byrne, to me known to be the
individual described in and who executed the foregoing instrument, and acknowledged
execution of the same.

Monica Kesling
Notary Public

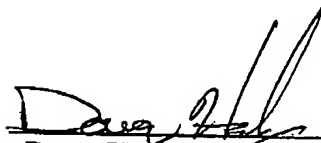


Docket No.: M4065.0239/P239
Micron No.: 99-0544.00/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ASSIGNMENT AND AGREEMENT

Signature Page for Fourth Inventor


Doug Hahn

Date: 8/31/00

United States of America)
State Idaho) ss.:
County Ada)

On this 31 day of August, 2000, before me
personally came Doug Hahn, to me known to be the
individual described in and who executed the foregoing instrument, and acknowledged
execution of the same.


Notary Public

